

Cohort 2018 Four-Year Graduation Rates – State Results

The Massachusetts Department of Elementary and Secondary Education (DESE) calculates and reports graduation rates as part of overall efforts to improve educational outcomes for all students.

The 2018 four-year cohort graduation rate is calculated as follows:

$$\frac{\text{\# of students in cohort (denominator) who graduate in 4 years or less}}{\text{\# of 1st time entering 9th graders in 2014-15] - transfers out/deaths + transfers in}}$$

The 2018 four-year cohort graduation rate for Massachusetts public high schools decreased by 0.5 percentage points to 87.8 percent from 88.3 percent for the 2017 cohort. While the four-year graduation rate for the 2018 cohort decreased, the percentage of the cohort still enrolled in a Massachusetts public high school increased by 0.5 percentage points when compared to the 2017 cohort. Students from the 2018 cohort still enrolled in high school will have an opportunity to be included in the five-year graduation rate.

There are significant gaps in the graduation rates among subgroups. Among the major race and ethnicity subgroup rates, there is a 20.5 percentage point difference between the highest and lowest, belonging to Asian and Hispanic students. This difference is 0.8 percentage points higher than in 2017.

Additional critical findings of the report include:

- The dropout rate for the 2018 cohort was 4.8 percent. This rate is the lowest since the ESE began calculating cohort dropout rates in 2006.
- 5.5 percent of the 2018 cohort is still enrolled in high school.
- The four-year graduation rate for English learners in the 2018 cohort increased by 0.7 percentage points as compared to English learners in the 2017 cohort.

Table 1. Cohort Graduation Rates 2007-2018

	2007 Cohort	2008 Cohort	2009 Cohort	2010 Cohort	2011 Cohort	2012 Cohort	2013 Cohort	2014 Cohort	2015 Cohort	2016 Cohort	2017 Cohort	2018 Cohort
4-Yr Rate	80.9%	81.2%	81.5%	82.1%	83.4%	84.7%	85.0%	86.1%	87.3%	87.5%	88.3%	87.8%
5-Yr Rate	84.0%	84.2%	84.0%	84.7%	86.3%	87.5%	87.7%	88.5%	89.4%	89.8%	90.1%	N/A

The following tables and graphs further summarize the results for the 2018 cohort. The results are based on data submitted by school districts through the Department's Student Information Management System.

Table 2. Graduation Results for All Students and Student Subgroups¹

		Graduates		Non-Graduates²				
	2018 Cohort # ¹	4-Year Rate	Difference from 2017	Still in School	Non-Grad Completer ³	HS Equiv.	Dropped Out	Expelled
All Students	74,641	87.8%	-0.5	5.5%	1.1%	0.7%	4.8%	0.0%
Female	36,567	90.3%	-0.4	4.2%	1.2%	0.7%	3.7%	0.0%
Male	38,050	85.3%	-0.6	6.8%	1.1%	0.8%	5.8%	0.0%
English Learner ⁴	6,612	64.1%	+0.7	13.0%	6.7%	0.3%	15.8%	0.0%
Eco. Dis.	28,083	78.4%	-0.6	9.1%	2.2%	1.3%	9.0%	0.0%
Students w/ Disabilities	14,571	72.4%	-0.4	15.7%	2.7%	1.1%	8.2%	0.0%
High Needs ⁵	37,019	78.0%	-2.0	10.2%	2.2%	1.2%	8.5%	0.0%
African American	7,019	80.1%	+0.1	10.4%	2.7%	0.6%	6.2%	0.0%
Asian	4,600	94.3%	+0.2	3.0%	0.7%	0.3%	1.7%	0.0%
Hispanic	13,365	73.8%	-0.6	9.9%	3.2%	1.1%	11.9%	0.0%
Multi-race, Non-Hisp.	1,910	86.5%	+1.3	6.6%	0.9%	1.0%	4.9%	0.0%
Native American	151	83.4%	+2.0	4.6%	2.0%	2.0%	7.9%	0.0%
Pacific Islander	82	90.2%	+11.9	4.9%	2.4%	0.0%	2.4%	0.0%
White	47,514	92.2%	-0.4	3.8%	0.4%	0.7%	2.9%	0.0%
Urban	25,108	77.7%	-0.2%	9.4%	2.6%	1.2%	9.2%	0.0%

¹ Due to rounding, row percentages may not equal 100 percent.

² In the reporting of aggregate results, students are included in the first column (from left to right) for which they qualify. For example, students who dropped out or were expelled, but earned a high school equivalency, are included in that category. Students are only reported in one category.

³ Non-Grad Completer includes 1) students who earned a certificate of attainment, 2) students who met local graduation requirements but the district does not offer certificates of attainment, and 3) students with special needs who reached the maximum age (22) but did not graduate.

⁴ The English language learner, special education, and economically disadvantaged subgroups include all students that were reported in those categories at least once in high school. Students can be counted in more than one group.

⁵ High Needs subgroup includes students categorized as any of the following as of October 1, 2018) Economically Disadvantaged, 2) English language learner, 3) Students with disabilities, as well as students categorized as an English language learner during the prior two school years (2015-16 and/or 2017-18).

Table 3. Graduation Results for Race/Ethnicity Groups by Gender

	2018 Cohort #	Graduates		Non-Graduates				
		4-Year Rate	Difference from 2017	Still in School	Non-Grad Completer	HS Equiv.	Dropped Out	Expelled
African American Female	2,289	83.8%	-0.9	8.3%	2.7%	0.4%	4.8%	0.0%
African American Male	3,599	76.5%	+1.1	12.4%	2.7%	0.8%	7.4%	0.0%
Asian Female	2,289	95.4%	-0.1	2.2%	0.7%	0.3%	1.4%	0.0%
Asian Male	2,309	93.2%	+0.4	3.8%	0.6%	0.4%	1.9%	0.0%
Hispanic Female	6,466	79.0%	-0.2	7.8%	3.3%	1.0%	8.9%	0.0%
Hispanic Male	6,898	69.0%	-0.8	11.8%	3.1%	1.2%	14.8%	0.1%
Multi-race Female	946	87.9%	-0.9	5.0%	1.2%	1.0%	5.0%	0.0%
Multi-race Male	964	85.2%	+3.5	8.3%	0.6%	1.1%	4.8%	0.0%
Native American Female	68	88.2%	+0.7	4.4%	4.4%	0.0%	2.9%	0.0%
Native American Male	83	79.5%	+4.8	4.8%	0.0%	3.6%	12.0%	0.0%
Pacific Islander Female	47	93.6%	+5.1	4.3%	0.0%	0.0%	2.1%	0.0%
Pacific Islander Male	35	85.7%	+13.6	5.7%	5.7%	0.0%	2.9%	0.0%
White Female	23,332	93.9%	-0.3	2.7%	0.4%	0.6%	2.4%	0.0%
White Male	24,162	90.6%	+0.5	4.8%	0.4%	0.7%	3.4%	0.0%

Table 4. Graduation Results for Students Receiving Special Education Services by Gender

		Graduates		Non-Graduates				
	2018 Cohort #	4-Year Rate	Difference from 2017	Still in School	Non-Grad Completer	HS Equiv.	Dropped Out	Expelled
Students w/ Disabilities Female	5,469	73.8%	-1.0	14.2%	3.2%	1.3%	7.5%	0.0%
Students w/ Disabilities Male	9,095	71.5%	-0.2	16.6%	2.4%	1.0%	8.6%	0.0%

Table 5. Graduation Results for Economically Disadvantaged Students by Gender

		Graduates		Non-Graduates				
	2018 Cohort #	4-Year Rate	Difference from 2017	Still in School	Non-Grad Completer	HS Equiv.	Dropped Out	Expelled
Eco. Dis. Female	13,566	82.2%	-0.7	8.0%	2.2%	1.3%	6.3%	0.0%
Eco. Dis. Male	14,509	74.9%	-0.4	10.8%	2.2%	1.2%	9.5%	0.0%

Table 6. Graduation Results for High Needs Students by Gender

		Graduates		Non-Graduates				
	2018 Cohort #	4-Year Rate	Difference from 2017	Still in School	Non-Grad Completer	HS Equiv.	Dropped Out	Expelled
High Needs Female	16,979	81.2%	-2.1	8.2%	2.4%	1.2%	7.0%	0.0%
High Needs Male	20,027	75.2%	+1.8	11.8%	2.1%	1.2%	9.7%	0.0%

Table 7. Graduation Results for English Language Learner Students by Gender

		Graduates		Non-Graduates				
	2018 Cohort #	4-Year Rate	Difference from 2017	Still in School	Non-Grad Completer	HS Equiv.	Dropped Out	Expelled
ELL Female	3,036	69.5%	+1.3	10.6%	7.9%	0.4%	11.6%	0.0%
ELL Male	3,575	59.6%	+0.1	14.9%	5.7%	0.3%	19.4%	0.0%
ELL in Original Cohort	3,799	69.2%	-1.9	10.7%	5.1%	0.4%	14.5%	0.0%
ELL Entered Cohort after 10/1/14	2,813	57.3%	+4.4	16.0%	8.9%	0.2%	17.6%	0.0%

Table 8. Graduation Results for Race/Ethnicity by English Language Learner Status

		Graduates		Non-Graduates				
	2018 Cohort #	4-Year Rate	Difference from 2017	Still in School	Non-Grad Completer	HS Equiv.	Dropped Out	Expelled
African American ELL	1,330	70.2%	+0.4	13.5%	8.1%	0.2%	7.9%	0.0%
African American Non-ELL	5,689	82.4%	+0.2	9.7%	1.4%	0.7%	5.7%	0.0%
Asian ELL	692	85.8%	+1.0	7.7%	2.3%	0.1%	4.0%	0.0%
Asian Non-ELL	3,908	95.8%	-0.3	2.2%	2.2%	0.4%	1.3%	0.0%
Hispanic ELL	3,950	56.5%	+2.0	14.4%	7.3%	0.5%	21.4%	0.0%
Hispanic Non-ELL	9,415	81.1%	-0.8	8.0%	1.5%	1.4%	7.9%	0.0%
Multi-race ELL	32	78.1%	+11.4	12.5%	3.1%	0.0%	6.3%	0.0%
Multi-race Non-ELL	1,878	86.7%	+1.1	6.5%	0.9%	1.1%	4.8%	0.0%
Native American ELL	12	50.0%	--	8.3%	16.7%	0.0%	25.0%	0.0%
Native American Non-ELL	139	86.3%	+3.5	4.3%	0.7%	2.2%	6.5%	0.0%
Pacific-Islander ELL	6	100%	--	0.0%	0.0%	0.0%	0.0%	0.0%
Pacific Islander Non-ELL	76	89.5%	+6.4	5.3%	2.6%	0.0%	2.6%	0.0%
White ELL	590	75.6%	+1.0	9.0%	5.1%	0.2%	10.2%	0.0%
White Non-ELL	46,924	92.4%	-0.4	3.7%	0.3%	0.7%	2.8%	0.0%

Table 9. Graduation Results for Non-Mobile and Mobile Students⁶

		Graduates		Non-Graduates				
High Schools Attended	2018 Cohort #	4-Year Rate	Difference from 2017	Still in School	Non-Grad Completer	HS Equiv.	Dropped Out	Expelled
One School	54,837	91.4%	+0.0	3.6%	1.0%	0.5%	3.5%	0.0%
Two Schools	16,428	82.1%	-2.3	8.5%	1.3%	1.2%	6.9%	0.0%
Three Schools	2,674	58.7%	-5.8	21.5%	2.6%	2.6%	14.5%	0.0%
Four or More Schools	702	42.3%	-2.3	30.2%	2.7%	4.6%	20.2%	0.0%

⁶ Mobility refers to the number of different high schools that the student attended within the Commonwealth. Students who never moved or moved in from another state or a private school and attended one public high school in Massachusetts are represented in the “One School” row.

Table 10. Competency Determination (CD) Status for Select Non-Graduate Groups

	Still in School			Dropped Out ⁷		
	Number	CD	No CD	Number	CD	No CD
All Students	4,136	53.8%	46.2%	1,754	63.6%	36.4%
Female	1,528	53.1%	46.9%	721	64.6%	35.4%
Male	2,605	54.1%	45.9%	1,029	62.7%	37.3%
English Language Learner	858	39.6%	60.4%	289	28.0%	72.0%
Econ Dis.	2,830	51.4%	48.6%	1,289	60.9%	39.1%
Students w/ Disabilities	2,287	41.4%	58.6%	598	54.7%	45.3%
High Needs	3,761	50.3%	49.7%	1,496	60.0%	40.0%
African American	730	52.6%	47.4%	171	57.9%	42.1%
Asian	138	51.4%	48.6%	49	75.5%	24.5%
Hispanic	1,319	48.3%	51.7%	589	45.7%	54.3%
Multi-race, Non-Hisp.	127	55.9%	44.1%	56	67.9%	32.1%
Native American	7	28.6%	71.4%	6	50.0%	50.0%
Pacific Islander	4			0		
White	1,811	58.4%	41.6%	883	75.8%	24.2%

Table 11. Distribution of Graduation Rates in the Aggregate for Districts⁸

2018 Four-Year Graduation Rate	Number of Districts	Percentage of Districts
< 50%	8	2.6%
50 - <60%	3	1.0%
60 - <70%	4	1.3%
70 - <80%	25	8.3%
80 - <85%	31	10.3%
85 - <90%	42	13.9%
90 - <95%	87	28.8%
95 - 100%	102	33.8%
Total	302	100.0%

⁷ Only includes still enrolled students and cohort dropouts that attempted the 10th grade ELA and Mathematics test at least once. This represents a change from previous reports where all dropouts regardless of test status were included in the analysis.

⁸ Includes districts with at least six students in the cohort. District analyses include charter schools, regional school districts and vocational/technical high schools.

Table 12. Distribution of Graduation Rates in the Aggregate for Schools⁹

2018 Four-Year Graduation Rate	Number of Schools	Percentage of Schools
< 50%	35	9.1%
50 - <60%	12	3.1%
60 - <70%	12	3.1%
70 - <80%	29	7.5%
80 - <85%	25	6.5%
85 - <90%	53	13.7%
90 - <95%	79	20.5%
95 – 100%	141	36.5%
Total	386	100.0%

⁹ Includes schools with at least six students in the cohort